

CLAIMS

1. A genetic construct for the selective expression of a nucleic acid sequence in plant stomatal guard cells, said construct containing the nucleic acid sequence functionally linked to the promoter SEQ ID No. 1, or to a fragment or variant thereof having promoter activity.
- 5 2. The construct of claim 1, wherein said promoter fragment contains SEQ ID No. 2.
3. The construct of claim 1, wherein said promoter fragment contains SEQ 10 ID No. 3.
4. The construct of claim 1, wherein said promoter fragment contains SEQ ID No. 4.
5. The construct of claim 1, wherein the nucleic acid sequence or the encoded product are involved in the intracellular signalling pathway 15 modulated by abscisic acid (ABA).
6. The construct of claim 5, wherein said nucleic acid sequence contains the coding sequences of *Osm1*, *Rac1*, *Kat1*, *Ost1* or *Chl1* genes.
7. The construct of claim 5, wherein said nucleic acid sequence codes for an antisense RNA.
- 20 8. A plant expression vector containing a genetic construct according to claims 1-7.
9. The vector of claim 8, which is a bacterial plasmid, a bacterial artificial chromosome (BAC), a yeast artificial chromosome (YAC), a viral vector or a vector for *Agrobacterium*-mediated DNA transfer.
- 25 10. The vector of claim 9, which is a binary vector for *Agrobacterium*-mediated DNA transfer.
11. A monocotyledonous or dicotyledonous plant containing a vector according to claims 8-10, or a genetic construct according to claims 1-7.

12. The use of a genetic construct according to claims 1-7, or a vector according to claims 8-10, for selective expression of nucleic acid sequences in stomatal guard cells.

13. The use according to claim 12, wherein said heterologous sequence is
5 involved in the regulation of stoma aperture/closure.

14. A method for regulating the expression of nucleic acid sequences in a plant, which comprises introducing in said plant, in a vegetative or reproductive part thereof, a genetic construct according to claims 1-7 or a vector according to claims 8-10.